Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH
This Safety Data Sheet cancels and replaces all preceding SDS for this product.

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Code:	**CM4019**
Product name	**FC GIOIA CANDLE**
Chemical name and synonym	**Scented candle**
UFI:	**GX50-V0P8-3007-913G**

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use **Scented candle**

Identified Uses	Industrial	Professional	**Consumer**
Consumer use		✔	✔

Uses Advised Against

Do not use for other uses

1.3. Details of the supplier of the safety data sheet

Name	**CULTI MILANO SpA**
Full address	**Via dell'Aprica, 12**
District and Country	**20158 Milano (MI)** **Italy**
	Tel. +39 02/49784974
	Fax +39 02/49789135
e-mail address of the competent person	
responsible for the Safety Data Sheet	**culti@culti.com**

1.4. Emergency telephone number

For urgent inquiries refer to

CULTI MILANO SpA - Tel. +39 02/49784974 (Contact from Monday to Friday from 8.30 / 12.30 AM- 1.30 / 6.00 PM)
ITALIAN POISON CENTER
Ospedale Niguarda Cà Granda - Milano Tel. +39 02/66101029
CAV Centro Nazionale Informazione Tossicologica - Pavia Tel. +39 0382/24444
Centro Antiveleni Bergamo - +39 80011858 (CAV Ospedali Riuniti - Bergamo)
Centro Antiveleni Verona - +39 800011858 (Azienda Ospedaliera Integrata - Verona)
Centro Antiveleni Firenze - Tel. +39 055/7947819 (Azienda Ospedaliera 'Careggi' U.O. Tossicologia Medica-Firenze)
Centro Antiveleni Roma - Tel. +39 06/3054343 (CAV Policlinico Gemelli - Roma)
Centro Antiveleni Roma - Tel. +39 06/49978000 (CAV Policlinico Umberto I - Roma)
Centro Antiveleni Roma - Tel. +39 06/68593726 (CAV Osp.Pediatrico 'Bambino Gesù' DEA - Roma)
Centro Antiveleni Napoli - Tel. +39 081/7472870 (CAV Ospedale Cardarelli - Napoli)
Centro Antiveleni Foggia - Tel. +39 800183459 (CAV Az. Osp. Univ. Foggia - Foggia)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Skin sensitization, category 1A	H317	May cause an allergic skin reaction.

2.2. Label elements
Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:

Signal words: **Warning**

Hazard statements:
H317 May cause an allergic skin reaction.

Precautionary statements:
P501 Dispose of contents / container to local rulements.
P280 Wear protective gloves.
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P273 Avoid release to the environment.
P333+P313 If skin irritation or rash occurs: Get medical advice / attention.

Contains: Cinnamal
(R)-P-MENTHA-1,8-DIENE
Linalool
Linalyl acetate
Citral
Benzene, 1-Methoxy-4- (1-Propenyl) -, (E) -
2-Propenal, 2-Methyl-3-Phenyl-, (2e) -
Cinnamyl alcohol
Eucalyptol
Coumarin
Eugenol

2.3. Other hazards
On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.
The product does not contain substances with endocrine disrupting properties in concentration >= 0.1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	**x = Conc. %**	**Classification (EC) 1272/2008 (CLP)**
Propyl (2s) -2- (1,1-Dimethylpropoxy) -propanoate		
CAS 319002-92-1	3 ≤ x < 3,5	Aquatic Chronic 3 H412
EC 437-530-0		
INDEX -		

REACH Reg. 01-0000018277-65

(R)-P-MENTHA-1,8-DIENE

CAS 5989-27-5	1 ≤ x < 1,5	Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
EC 227-813-5		
INDEX 601-096-00-2		
REACH Reg. 01-2119529223-47		

Coumarin

CAS 91-64-5	0,6 ≤ x < 0,7	Acute Tox. 4 H302, Skin Sens. 1B H317
EC 202-086-7		STA Oral: 500 mg/kg
INDEX -		
REACH Reg. 01-2119949300-45-0000		

Cinnamal

CAS 104-55-2	0,6 ≤ x < 0,7	Acute Tox. 4 H312, Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1A H317, Aquatic Chronic 3 H412
EC 203-213-9		LD50 Dermal: 1260 mg/kg
INDEX -		
REACH Reg. 01-2119935242-45-0000		

Eugenol

CAS 97-53-0	0,6 ≤ x < 0,7	Eye Irrit. 2 H319, Skin Sens. 1B H317
EC 202-589-1		
INDEX -		
REACH Reg. 01-2119971802-33-0000		

Cinnamyl alcohol

CAS 104-54-1	0,25 ≤ x < 0,3	Acute Tox. 4 H302, Skin Sens. 1B H317
EC 203-212-3		LD50 Oral: 2000 mg/kg
INDEX -		
REACH Reg. 01-2119934496-29		

Eucalyptol

CAS 470-82-6	0,25 ≤ x < 0,3	Flam. Liq. 3 H226, Eye Irrit. 2 H319, Skin Sens. 1B H317
EC 207-431-5		
INDEX -		
REACH Reg. 01-2119967772-24-0000		

2-Propenal, 2-Methyl-3-Phenyl-, (2e) -

CAS 15174-47-7	0,15 ≤ x < 0,2	Skin Sens. 1B H317
EC 701-219-0		
INDEX -		
REACH Reg. 01-2119538797-21		

Benzene, 1-Methoxy-4- (1-Propenyl) -, (E) -

CAS 4180-23-8	0,15 ≤ x < 0,2	Skin Sens. 1B H317
EC 224-052-0		
INDEX -		
REACH Reg. 01-2119979097-22		

Linalyl acetate

CAS 115-95-7	0,15 ≤ x < 0,2	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1B H317

EC 204-116-4

INDEX -

REACH Reg. 01-2119983608-21-0000

Linalool

CAS 78-70-6	0,15 ≤ x < 0,2	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1B H317

EC 201-134-4

INDEX 603-235-00-2

REACH Reg. 01-2119474016-42-0000

Citral

CAS 5392-40-5	0,15 ≤ x < 0,2	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1B H317

EC 226-394-6

INDEX 605-019-00-3

REACH Reg. 01-2119462829-23-0000

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures
EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.
INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.
INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

4.2. Most important symptoms and effects, both acute and delayed
Specific information on symptoms and effects caused by the product are unknown.

4.3. Indication of any immediate medical attention and special treatment needed
Information not available.

SECTION 5. Firefighting measures

5.1. Extinguishing media
SUITABLE EXTINGUISHING EQUIPMENT
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

5.2. Special hazards arising from the substance or mixture
HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Do not breathe combustion products.

5.3. Advice for firefighters
GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
If there are no contraindications, spray powder with water to prevent the formation of dust.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions
The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up
Collect the leaked product and place it in containers for recovery or disposal. If there are no contraindications, use jets of water to eliminate product residues. Make sure the leakage site is well aired. Evaluate the compatibility of the container to be used, by checking section 10. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections
Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling
Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities
Store only in the original container. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)
Information not available.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

TLV-ACGIH ACGIH 2021

Propyl (2s) -2- (1,1-Dimethylpropoxy) -propanoate

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,013	mg/l
Normal value in marine water	0,0013	mg/l
Normal value for fresh water sediment	0,117	mg/kg/d
Normal value for marine water sediment	0,012	mg/kg/d
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,016	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				1,25 mg/kg bw/d				

Inhalation				2,17 mg/m3				8,8 mg/m3
Skin				1,25 mg/kg bw/d				2,5 mg/kg bw/d

Eugenol

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,0013	mg/l
Normal value in marine water	113	ng/L
Normal value for fresh water sediment	0,081	mg/kg/d
Normal value for marine water sediment	0,0081	mg/kg/d
Normal value for the food chain (secondary poisoning)	0,0155	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				3 mg/kg bw/d				
Inhalation				5,22 mg/m3				21,2 mg/m3
Skin				3 mg/kg bw/d				6 mg/kg bw/d

Cinnamal

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,008	mg/l
Normal value in marine water	800	ng/L
Normal value for fresh water sediment	0,101	mg/kg/d
Normal value for marine water sediment	0,0101	mg/kg/d
Normal value for water, intermittent release	0,00321	mg/l
Normal value of STP microorganisms	7,1	mg/l
Normal value for the terrestrial compartment	0,0156	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,625 mg/kg bw/d				
Inhalation				0,543 mg/m3				2,204 mg/m3
Skin				0,625 mg/kg bw/d				1,75 mg/kg bw/d

Coumarin

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,019	mg/l
Normal value in marine water	0,0019	mg/l
Normal value for fresh water sediment	0,15	mg/kg/d
Normal value for marine water sediment	0,015	mg/kg/d
Normal value of STP microorganisms	6,4	mg/l
Normal value for the terrestrial compartment	0,018	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic	Acute local	Acute	Chronic local	Chronic

				systemic		systemic		systemic
Inhalation				1,69 mg/m3				6,78 mg/m3
Skin				0,390 mg/kg bw/d				0,790 mg/kg bw/d

Eucalyptol

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,057	mg/l
Normal value in marine water	0,0057	mg/l
Normal value for fresh water sediment	1,425	mg/kg/d
Normal value for marine water sediment	0,1425	mg/kg/d
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,25	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				600 mg/kg bw/d				
Inhalation				1,74 mg/m3				7,05 mg/m3
Skin				1 mg/kg bw/d				2 mg/kg bw/d

Cinnamyl alcohol

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,0077	mg/l
Normal value in marine water	770	ng/L
Normal value for fresh water sediment	0,118	mg/kg/d
Normal value for marine water sediment	0,0118	mg/kg/d
Normal value for water, intermittent release	0,0077	mg/l
Normal value of STP microorganisms	16,127	mg/l
Normal value for the terrestrial compartment	0,019	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation				0,465 mg/m3				2,64 mg/m3
Skin				0,268 mg/kg bw/d				0,749 mg/kg bw/d

Citral

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
TLV-ACGIH			5			SKIN	IFV, Skin, DSEN, A4

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,00678	mg/l
Normal value in marine water	678	ng/L
Normal value for fresh water sediment	0,125	mg/kg/d
Normal value for marine water sediment	0,0125	mg/kg/d

Normal value of STP microorganisms	1,6	mg/l
Normal value for the terrestrial compartment	0,0209	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,600 mg/kg bw/d				
Inhalation				2,7 mg/m3				9 mg/m3
Skin				1 mg/kg bw/d				1,7 mg/kg bw/d

Linalool

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,2	mg/l
Normal value in marine water	0,02	mg/l
Normal value for fresh water sediment	2,22	mg/kg/d
Normal value for marine water sediment	0,222	mg/kg/d
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,327	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				2,49 mg/kg bw/d				
Inhalation				4,33 mg/m3				24,58 mg/m3
Skin			1,5 mg/cm2	1,25 mg/kg bw/d				3,5 mg/kg bw/d

Linalyl acetate

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,011	mg/l
Normal value in marine water	0,0011	mg/l
Normal value for fresh water sediment	0,609	mg/kg/d
Normal value for marine water sediment	0,0609	mg/kg/d
Normal value of STP microorganisms	1	mg/l
Normal value for the terrestrial compartment	0,115	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,200 mg/kg bw/d				
Inhalation				0,680 mg/m3				2,75 mg/m3
Skin				1,25 mg/kg bw/d				2,5 mg/kg bw/d

Benzene, 1-Methoxy-4- (1-Propenyl) -, (E) -

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,00682	mg/l
Normal value in marine water	682	ng/L

Normal value for fresh water sediment	0,514	mg/kg/d
Normal value for marine water sediment	0,0514	mg/kg/d
Normal value for water, intermittent release	0,00682	mg/l
Normal value of STP microorganisms	0,972	mg/l
Normal value for the terrestrial compartment	0,0988	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation				2,61 mg/m3				10,6 mg/m3
Skin				1,5 mg/kg bw/d				3 mg/kg bw/d

2-Propenal, 2-Methyl-3-Phenyl-, (2e) -

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,00138	mg/l
Normal value in marine water	138	ng/L
Normal value for fresh water sediment	0,0209	mg/kg/d
Normal value for marine water sediment	0,00209	mg/kg/d
Normal value for water, intermittent release	0,0039	mg/l
Normal value of STP microorganisms	3,66	mg/l
Normal value for the terrestrial compartment	0,058	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Skin							3,5 mg/cm2	

Legend:
(C) = CEILING; INHAL = Inhalable Fraction; RESP = Respirable Fraction; THORA = Thoracic Fraction.
VND = hazard identified but no DNEL/PNEC available; NEA = no exposure expected; NPI = no hazard identified.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION
In the case of prolonged contact with the product, protect the hands with penetration-resistant work gloves (see standard EN 374).
Work glove material must be chosen according to the use process and the products that may form. Latex gloves may cause sensitivity reactions.

SKIN PROTECTION
Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION
Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

None required, unless indicated otherwise in the chemical risk assessment.

ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	solid	Concentration: 100 % Temperature: 20 °C
Colour	white	Concentration: 100 % Temperature: 20 °C
Odour	characteristic	Concentration: 100 % Temperature: 20 °C
Odour threshold	Not applicable	
Melting point / freezing point	Not available	
Initial boiling point	Not available	
Flammability	Not available	
Lower explosive limit	Not available	
Upper explosive limit	Not available	
Flash point	= 160 °C	
Auto-ignition temperature	Not available	
pH	Not applicable	
Kinematic viscosity	Not available	
Solubility	insoluble in water	Concentration: 100 % Temperature: 20 °C
Partition coefficient: n-octanol/water	Not available	
Vapour pressure	Not available	
Density and/or relative density Relative vapour density	0,9 g/cm3 Not available	Temperature: 20 °C
Particle characteristics	Not available	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Evaporation rate	Not applicable
Explosive properties	not applicable
Oxidising properties	non ossidante

SECTION 10. Stability and reactivity

10.1. Reactivity
There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability
The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions
The vapours may also form explosive mixtures with the air.

10.4. Conditions to avoid
Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

10.5. Incompatible materials
Information not available

10.6. Hazardous decomposition products
In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.
It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Metabolism, toxicokinetics, mechanism of action and other information
Information not available

Information on likely routes of exposure
Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Information not available

Interactive effects
Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture:	Not classified (no significant component)
ATE (Oral) of the mixture:	Not classified (no significant component)
ATE (Dermal) of the mixture:	Not classified (no significant component)

Propyl (2s) -2- (1,1-Dimethylpropoxy) -propanoate

LD50 (Oral):	> 2000 mg/kg
LD50 (Dermal):	> 2000 mg/kg

Eugenol

LD50 (Oral):	2000 mg/kg Rat

Cinnamal

LD50 (Oral):	2220 mg/kg Rat
LD50 (Dermal):	1260 mg/kg Rabbit

Coumarin

LD50 (Oral):	293 mg/kg Rat
STA (Oral):	500 mg/kg estimate from table 3.1.2 of Annex I of the CLP

(figure used for calculation of the acute toxicity estimate of the mixture)

Cinnamyl alcohol

LD50 (Oral):	2000 mg/kg Rat
LD50 (Dermal):	2000 mg/kg Rat

Citral

LD50 (Oral):	6800 mg/kg Rat
LD50 (Dermal):	2000 mg/kg Rat

Linalool

LD50 (Oral):	2790 mg/kg Rat
LD50 (Dermal):	5610 mg/kg Rabbit

Linalyl acetate

LD50 (Oral):	9000 mg/kg Rat
LD50 (Dermal):	5000 mg/kg Rabbit

Benzene, 1-Methoxy-4- (1-Propenyl) -, (E) -

LD50 (Oral):	> 1420 mg/kg Rat
LD50 (Dermal):	4900 mg/kg Rabbit

2-Propenal, 2-Methyl-3-Phenyl-, (2e) -

LD50 (Oral):	2050 mg/kg Rat
LD50 (Dermal):	5000 mg/kg Rabbit

SKIN CORROSION / IRRITATION
Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION
Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION
Sensitising for the skin

Respiratory sensitization
Information not available

Skin sensitization
Information not available

GERM CELL MUTAGENICITY
Does not meet the classification criteria for this hazard class

CARCINOGENICITY
Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY
Does not meet the classification criteria for this hazard class

Adverse effects on sexual function and fertility
Information not available

Adverse effects on development of the offspring
Information not available.

Effects on or via lactation
Information not available

STOT - SINGLE EXPOSURE
Does not meet the classification criteria for this hazard class

Target organs
Information not available

Route of exposure
Information not available

STOT - REPEATED EXPOSURE
Does not meet the classification criteria for this hazard class

Target organs
Information not available

Route of exposure
Information not available

ASPIRATION HAZARD
Does not meet the classification criteria for this hazard class

11.2. Information on other hazards
Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

(R)-P-MENTHA-1,8-DIENE

LC50 - for Fish	35 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	69,6 mg/l/48h Daphnia pulex

Linalool

LC50 - for Fish	27,8 mg/l/96h
EC50 - for Crustacea	59 mg/l/48h
EC10 for Algae / Aquatic Plants	54,3 mg/l/4d

Coumarin

LC50 - for Fish	> 1,324 mg/l/96h
Chronic NOEC for Fish	8,012 mg/l 30 days
Chronic NOEC for Crustacea	0,5 mg/l 21 days
Chronic NOEC for Algae / Aquatic Plants	0,431 mg/l 72h

Linalyl acetate

LC50 - for Fish	11 mg/l/96h
EC50 - for Crustacea	59 mg/l/48h

EC50 - for Algae / Aquatic Plants	68 mg/l/72h

Cinnamal

LC50 - for Fish	> 2,35 mg/l/96h
Chronic NOEC for Fish	15,159 mg/l 28 days
Chronic NOEC for Algae / Aquatic Plants	37,23 mg/l freshwater algae

Eugenol

LC50 - for Fish	13 mg/l/96h
EC50 - for Crustacea	> 1,05 mg/l/48h
EC50 - for Algae / Aquatic Plants	24 mg/l/72h

Cinnamyl alcohol

LC50 - for Fish	9 mg/l/96h
EC50 - for Crustacea	7,7 mg/l/48h
EC50 - for Algae / Aquatic Plants	19,7 mg/l/72h

Eucalyptol

LC50 - for Fish	57 mg/l/96h
EC50 - for Crustacea	100 mg/l/48h
Chronic NOEC for Algae / Aquatic Plants	37 mg/l freshwater algae

Citral

LC50 - for Fish	6,78 mg/l/96h
EC50 - for Crustacea	6,8 mg/l/48h
EC50 - for Algae / Aquatic Plants	103,8 mg/l/72h

Propyl (2s) -2- (1,1-Dimethylpropoxy) - propanoate

LC50 - for Fish	13 mg/l/96h
EC50 - for Crustacea	20 mg/l/48h
EC50 - for Algae / Aquatic Plants	> 85 mg/l/72h

Benzene, 1-Methoxy-4- (1-Propenyl) -, (E) -

LC50 - for Fish	7 mg/l/96h
EC50 - for Crustacea	4,25 mg/l/48h
EC50 - for Algae / Aquatic Plants	9,57 mg/l/72h freshwater algae
Chronic NOEC for Fish	4,14 mg/l 7 days
Chronic NOEC for Crustacea	1,05 mg/l 21 days

2-Propenal, 2-Methyl-3-Phenyl-, (2e) -

LC50 - for Fish	> 1,2 mg/l/96h
EC50 - for Crustacea	9,9 mg/l/48h
EC10 for Algae / Aquatic Plants	0,12 mg/l/72h freshwater algae
Chronic NOEC for Crustacea	0,063 mg/l 21 days

12.2. Persistence and degradability

(R)-P-MENTHA-1,8-DIENE

Solubility in water 0,1 - 100 mg/l

Rapidly degradable

Linalool

Solubility in water 1,56 g/l

Rapidly degradable

Coumarin

Solubility in water 1,9 g/l

Rapidly degradable

Linalyl acetate

Solubility in water 30 mg/l

Rapidly degradable

Cinnamal

Solubility in water 2,8 g/l

Rapidly degradable

Eugenol

Solubility in water 1,154 g/l

Rapidly degradable

Cinnamyl alcohol

Solubility in water 2,542 g/l

Entirely degradable

Eucalyptol

Solubility in water 2,397 g/l

Rapidly degradable

Citral

Solubility in water 420 mg/l

Rapidly degradable

Propyl (2s) -2- (1,1-Dimethylpropoxy) -propanoate

Rapidly degradable

Benzene, 1-Methoxy-4- (1-Propenyl) -, (E) -

Solubility in water 111 mg/l

Rapidly degradable

2-Propenal, 2-Methyl-3-Phenyl-, (2e) -

Solubility in water 490 mg/l

Rapidly degradable

12.3. Bioaccumulative potential

(R)-P-MENTHA-1,8-DIENE

Partition coefficient: n-octanol/water	4,38
BCF	1022

Linalool

Partition coefficient: n-octanol/water	2,9 Log Kow @ 20°C

Coumarin

Partition coefficient: n-octanol/water	1,39 Log Kow @ 25°C

Linalyl acetate

Partition coefficient: n-octanol/water	3,9 Log Kow
BCF	174 L/kg ww

Cinnamal

Partition coefficient: n-octanol/water	1,83 Log Kow @ 25°C

Eugenol

Partition coefficient: n-octanol/water	1,83 Log Kow @ 30°C

Cinnamyl alcohol

Partition coefficient: n-octanol/water	1,452 Log Kow @ 25°c

Eucalyptol

Partition coefficient: n-octanol/water	3,4 Log Kow
BCF	112 L/kg ww

Citral

Partition coefficient: n-octanol/water	2,76 Log Kow

Benzene, 1-Methoxy-4- (1-Propenyl) -, (E) -

Partition coefficient: n-octanol/water	3,388 Log Kow
BCF	79,92 L/kg ww

2-Propenal, 2-Methyl-3-Phenyl-, (2e) -

Partition coefficient: n-octanol/water	2,471 Log Kow @ 25°C

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects
Information not available.

SECTION 13. Disposal considerations

13.1. Waste treatment methods
Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number or ID number
Not applicable.

14.2. UN proper shipping name
Not applicable.

14.3. Transport hazard class(es)
Not applicable.

14.4. Packing group
Not applicable.

14.5. Environmental hazards
Not applicable.

14.6. Special precautions for user
Not applicable.

14.7. Maritime transport in bulk according to IMO instruments
Information not relevant.

SECTION 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point	40

Contained substance

Point	75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors
Not applicable

Substances in Candidate List (Art. 59 REACH)
On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)
None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:
None

Substances subject to the Rotterdam Convention:
None

Substances subject to the Stockholm Convention:
None

Healthcare controls
Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment
A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 3	Flammable liquid, category 3
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
Skin Sens. 1A	Skin sensitization, category 1A
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level

- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:
The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.
CALCULATION METHODS FOR CLASSIFICATION
Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.
Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:
The following sections were modified:
01 / 03 / 08 / 09 / 11 / 12.